KMgen guide

Guide version: 0.1

1. Using Emacs

1.1. Emacs commands and shortcuts brought by the KMgen emacs startup file

See Installation entry in the readme file.

F3 - gnuserv-edit

To send a buffer back from emacs to KMgen.

F5 - indent-sexp

Indent each line of the list starting just after point

F6 - indent-and-fontify-defun

Indent and fontify (color) the current top-level expression

C-F6 - indent-and-fontify-buffer

Indent and fontify (color) the expressions in the current buffer

F7 - km-init-from-files

To make Emacs use newly created completion and coloration files from KMgen.

1.2. How to use word completion and coloration in emacs

First of all, the completion and coloration files must be generated from the current ontology: see *Make Emacs completion file* in Emacs menu of KMgen.

To use word completion:

- In Emacs, push F7 key to make Emacs use the newly created files.
- To fill out a completion of a word, push Ctrl-tab until the right word appears. (or Ctrl-ret and Alt-ret).

NOTE

At startup time, Emacs will use the last completion and coloration generated files.

2. Menus

2.1. Ontology menu

2.1.1. Choose server

In this dialog enter the server name or IP address and a PG (PostgreSQL) user account name and password.

Troubleshooting

If you can't connect to PG (PostgreSQL) server **over the network**, please check the following:

• Check if PostgreSQL server listens to your IP address. In order to access the server over the network, enable listening on your address. For PostgreSQL servers starting with version 8.0, this is controlled using the "listen_addresses" parameter in the **postgresql.conf** file. Here, you can enter a list of IP addresses the server should listen on, or simply use '*' to listen on all available IP addresses. Remove the '#' before listen addresses if there is one:

listen addresses = '*'

Stop and restart the server for the change to take effect.

• Access to the server over the network must be granted (Host Based Authentication). The initial settings in **pg_hba.conf** are quite restrictive. You'll probably want to add something like:

host all all 192.168.0.0/24 md5

This example grants MD5 encrypted password access to all databases to all users on the private network 192.168.0.0/24.

Stop and restart the server for the change to take effect.

- Check PG port number. KMgen try to connect to PostgreSQL on port 5432 (PG usual default). At present time you can't change port number in KMgen, send a request for a patch to the KMgen support.
- Test if you have network connectivity from your client to the server host using ping or equivalent tools.
- Is your network firewall configured correctly?

2.1.2. KMgen user

- 2.1.3. New
- 2.1.4. Open
- 2.1.5. Close

2.1.6. Copy, Dump and Restore dump

If you want to use the copy, dump and restore KMgen commands, the following PostgreSQL utilities must be on the Windows path: pg_dump.exe, createdb.exe and pg_restore.exe

2.1.7. Import from KM file

To populate the currently open database from a KM file.

This KM file must follow a few organisation rules. In the Tools directory of the KMgen distribution, there is a *save-kmgen.lisp* file that defines a Lisp function (*write-KMgen*) to be used at the KM prompt in order to save a knowledge-base to a KM file suitable for the KMgen import function.

For more details, read the *file-import.rtf* file (document in French) which is about how a KM file has to be organized to be importable in KMgen and which KM syntax variants are ignored.

2.1.8. Export to KM file

In this dialog the boxes about situtations, theories and languages should be ignored (experimental features).

2.1.9. Import documentation

2.1.10.Export documentation

2.1.11.Quit

Frame menu

2.1.12.New

In this dialog the box about world dependance should be ignored (experimental feature – see World dependance command and glossary).

- 2.1.13.New axiom
- 2.1.14.Clone
- 2.1.15.Add parent
- 2.1.16.Remove parent
- 2.1.17.Move
- 2.1.18.Rename
- 2.1.19.Delete

Remark

Deleting a frame delete also its documentation (which is stored in a specific documentation database). For possible restoration, the deleted documentation is written in a file in the \KMgen\data\deleted-doc\ directory.

2.1.20. World dependance

Experimental feature. Not directly related to a KM feature, a way to associate a frame to a world in the database ("world dependent frame", see glossary).

2.1.21.Activate/Unactivate

Unactivated frame appears in italic. In the export to KM file dialog, there is an option to include or not the unactivated frames in the file.

- 2.1.22. Activate all
- 2.1.23.Show all
- 2.1.24.Info window
- 2.1.25.Find
- 2.1.26.Global find
- 2.1.27. Cross search
- 2.1.28. Cross search result

2.2. Emacs menu

2.2.1. Edit axiom

2.2.2. Edit frame

2.2.3. Edit documentation

Instead of using Emacs to edit a frame documentation, it's possible to edit directly in any documentation pane. Click right to save.

2.2.4. Seize/Unseize

A frame can be seized by a KMgen user. A seized frame can be modified only by the user that has seized it. The frames seized by the current user appear in bold face.

Many of the KMgen commands that act on a frame seize the frame automatically and temporarily. Especially the *Edit axiom* and *frame* commands but also most of the commands in the frame menu.

- 2.2.5. Unseize all
- 2.2.6. Clear report (log) file
- 2.2.7. Make emacs completion file
- 2.2.8. Reindent all axioms
- 2.2.9. Reset

2.3. View menu

2.3.1. Previous hierarchy

2.3.2. Next hierarchy

2.3.3. Previous frame

2.3.4. Worlds

To show or hide panes in the main window to manage axioms defined in situations and theories.

2.3.5. Languages

An experimental feature. Should be ignored.

2.3.6. Reset

Reset the GUI and related data in memory, especially data related to the displayed trees.

2.4. Tools menu

2.4.1. Export frame names

2.4.2. List frames

2.4.3. Statistic

2.4.4. Last error

2.4.5. Check root attribute

This menu item will be removed.

2.4.6. Drop database content

This menu item should be removed.

2.4.7. Options

3. Glossary

World: a situation instance or a theory instance.